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(54) Title: COATINGS FOR ARTICLES USED WITH MOLTEN METAL

(57) Abstract: An improved multilayer coating for use on molten metal holding and transfer apparatus, the coating including a bond layer applied directly to the surface of molten metal holding and transfer apparatus, and a porous layer of ceramic material produced by co-deposition of a powder of said ceramic material and a powder of a suitable organic polymer material and, after the co-deposition, heating of said polymer material to thermally decompose the polymer material and form the porous layer. The bond layer preferably is formed of a metallic, intermetallic or composite particulate materials. The metal component may be in the metallic, intermetallic, oxide, clad or alloyed form consisting of any one or more of the metal components selected from the group of Mo, Ni, Al, Cr, Co, Y and W and may be in combination with yttria, alumina, zirconia, boron, carbon and have a particle size in the range of 5 to 250 m, typically 40 to 125 m. The bond layer preferably has a thickness of 5 to 300 m with a substantially uniform coating layer being provided over the surfaces to have the porous ceramic coat applied.



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